

Claims:

1. A mobile food dispenser comprising:
 - a shell;
 - a controller;
 - at least one drive motor for moving the dispenser across a surface in different speeds and directions in response to direction from the controller;
 - at least one sensor configured to detect the presence of an animal;
 - at least one compartment including an access mechanism for controlling the animal's access to food contained within the compartment, wherein the access mechanism is actuated by the controller; wherein
 - the controller is configured to move the dispenser and actuate the hatch mechanism to stimulate the animal, in response to a detected presence of the animal.
2. The dispenser of Claim 1, comprising at least one sensor configured to discern an environment surrounding the dispenser.
3. The dispenser of Claim 2, wherein:
 - the at least one sensor configured to detect the presence of an animal comprises at least one of a motion detector, an infrared detector, an optical sensor, and a microphone; and
 - the at least one sensor configured to discern an environment surrounding the dispenser comprises at least one of a proximity switch, a range-finder, an infrared detector, and an optical sensor.
4. The dispenser of Claim 2, wherein the dispenser dispenses food according to a predetermined schedule.

5. The dispenser of Claim 2, wherein the dispenser disperses food in response to specific behavior of the animal.

6. The dispenser of Claim 5, wherein the specific behavior includes an activity level of the animal rising above a threshold.

7. The dispenser of Claim 5, wherein the specific behavior includes a sound emitted by the animal.

8. The dispenser of Claim 5, wherein the specific behavior includes the animal contacting the dispenser with an amount of force above a threshold.

9. The dispenser of Claim 5, wherein the dispenser moves to stimulate the animal to chase the dispenser, and dispenses food after the animal catches the dispenser.

10. The dispenser of Claim 9, wherein when the animal catches the dispenser, the dispenser dispenses food according to a random probability.

11. The dispenser of Claim 5, wherein the dispenser responds differently to the animal based on the time of day.

12. The dispenser of Claim 5, wherein the dispenser responds differently to the animal based on an ambient temperature.

13. The dispenser of Claim 5, wherein the dispenser responds differently to the animal based on an amount of ambient light.

14. The dispenser of Claim 5, wherein the dispenser responds differently to the animal based on an amount of food remaining in the dispenser.

15. The dispenser of Claim 5, wherein the dispenser dispenses a first food according to a predetermined schedule, and dispenses a second food in response to specific behavior of the animal.

16. The dispenser of Claim 5, wherein the dispenser distinguishes between or recognizes different animals, and responds differently to the different animals.

17. The dispenser of Claim 5, wherein the dispenser receives and immediately acts upon remote control instructions, and stores and repeats the received instructions.

18. The dispenser of Claim 5, wherein the dispenser periodically initiates interaction with the animal to stimulate the animal.

19. The dispenser of Claim 18, wherein the dispenser mimics the actions of prey to stimulate the animal to chase or engage the dispenser.

20. The dispenser of Claim 19, wherein the dispenser moves near obstacles or objects in an ambient environment while being chased by the animal, to force or encourage the animal to use agility and/or strength to negotiate or avoid the object.

21. The dispenser of Claim 5, wherein the dispenser includes means for recording behavior the dispenser and of the animal, and means for transferring the recorded information to a receiving device external to the dispenser.

22. The dispenser of Claim 5, together at least one other dispenser of at least the same capability, where the dispensers communicate with each other and act in concert to stimulate the animal.

23. The dispenser of Claim 1, together with a dock that replenishes food and/or energy stores of the dispenser when the dispenser physically engages the dock.